

Amendments to the Claims

1. (ORIGINAL) A first device for communicating with other devices using a frequency hopping wireless interface, the first device being arranged to send a sequence of messages each on a different frequency, for finding other devices within range, and being arranged to listen for a response during a subsequent response window, on one or more response frequencies, being a subset of less than all possible response frequencies, and to receive return information from the other devices without needing to set up a frequency hopping connection, the response window having a duration sufficient to receive more than one response.

2. (ORIGINAL) The first device of claim 1, wherein the sequence of frequencies of the messages is predetermined and related to the time of the start of the response window.

3. (CURRENTLY AMENDED) The first device of ~~claim 1 or 2~~claim 1, being a mobile device.

4. (CURRENTLY AMENDED) The first device of ~~any preceding claim~~claim 1, the sequence of messages having an indication of a response channel.

5. (CURRENTLY AMENDED) The first device of ~~any preceding claim~~claim 1, the return information having received signal strength information from the other device or devices.

6. (CURRENTLY AMENDED) The first device of ~~any preceding claim~~claim 1, the return information having location information from the other device or devices.

7. (CURRENTLY AMENDED) The first device of ~~any preceding claim~~claim 1, the return information including frequency hopping and synchronisation information.

8. (CURRENTLY AMENDED) The first device of ~~any preceding~~
~~claim~~claim 1, the wireless interface being compatible with the Bluetooth standard.

9. (CURRENTLY AMENDED) The first device of ~~any preceding~~
~~claim~~claim 1, the other device being a network access point.

10. (CURRENTLY AMENDED) The first device of claim 4 ~~or any claim~~
~~depending on claim 4~~, the response channel indication comprising a four bit code.

11. (CURRENTLY AMENDED) The first device of claim 4 ~~or any claim~~
~~depending on claim 4~~, the response channel indication being altered cyclically.

12. (CURRENTLY AMENDED) The first device of ~~any preceding~~
~~claim~~claim 1, incorporating a mobile phone or mobile personal computer.

13. (CURRENTLY AMENDED) An other device for use with the first
device of ~~any preceding claim~~claim 1, the other device being arranged to listen for
one or more of the messages, to determine a time of the response window after the
sequence of messages, and to send return information on that response frequency to
the first device without needing to establish a frequency hopping connection.

14. (ORIGINAL) The other device of claim 13, the messages including an
indication of a response channel, and the other device being arranged to use the
response channel indication to send a response.

15. (ORIGINAL) A method of communicating between a first device and
other devices having a frequency hopping wireless interface, the method having the
steps of:

sending from the first device a sequence of messages each on a different
frequency, for finding other devices within range,

listening at the first device on one response frequency or on a subset of less
than all possible response frequencies, during a response window having a duration
sufficient to receive more than one response,

determining at each of the other devices in range, a time of the response window after the sequence of messages, and

sending a response during the response window, from each of the other devices in range, to the first device, containing return information without needing to set up a frequency hopping connection.

16. (ORIGINAL) A method of offering a service on mobile devices, using return information sent to mobile devices by the method of claim 15, where the first device is a mobile device.

17. (ORIGINAL) The method of claim 16, the return information having location information, the service being a location based service, and the mobile device incorporating a mobile phone.

18. (ORIGINAL) A group of access points, each incorporating an other device of claim 13, and coupled to provide location information, or access to other telecommunications networks.

19. (ORIGINAL) A first device for communicating with other devices using a frequency hopping wireless interface, the first device being arranged to send a sequence of messages each on a different frequency, for finding other devices within range, the messages including an indication of a response channel, and being arranged to listen for a response during a subsequent response window, on one response frequency, and to receive return information from the other devices without needing to set up a frequency hopping connection.

20. (ORIGINAL) Software for a first device for use in the method of claim 15, for carrying out the steps of:

sending from the first device a sequence of messages each on a different frequency, for finding other devices within range, and

listening at the first device on one response frequency or on a subset of less than all possible response frequencies, during a response window having a duration sufficient to receive more than one response.